Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A data processing apparatus comprising:

means for generating a signal representative of recorded data on a data storage medium;

filtering means for receiving the generated signal and ~~equalising~~ equalizing the generated signal response at a predetermined level; and

signal correcting means for detecting a plurality of multiple-bit data representative of the ~~equalised~~ equalized signal and processing said multiple-bit data in dependence upon a predetermined set of data correction rules which, in operation of the apparatus, has the effect of enhancing the detection capability of the apparatus, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

2. (Original) A data processing apparatus as claimed in claim 1, wherein the set of data correction rules is selectively applied to a portion of the multiple-bit data, such application being based upon a comparison of said multiple-bit data with predetermined multiple-bit sequences and wherein the portion of the multiple-bit data are corrected in dependence upon the comparison.

3. (Original) A data processing apparatus as claimed in claim 2, wherein the multiple-bit data are corrected by interchanging and/or shifting the polarities of a number of data-bits at said portion of the multiple-bit data.

4. (Previously presented) A data processing apparatus as claimed in claim 2, wherein the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.

5. (Previously presented) A data processing apparatus as claimed in claim 2, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

6. (Cancelled).

7. (Currently amended) A data processing apparatus as claimed in ~~any preceding claim~~ claim 1, wherein the filtering means is arranged to provide an enhancement of the generated signal response to be detected.

8. (Original) A data processing apparatus as claimed in claim 7, wherein said response is subject to a certain target distribution.

9. (Currently amended) A data processing apparatus as claimed in ~~any preceding claim~~ claim 1, wherein the signal correcting means comprises a zero-threshold detector.

10. (Original) A data processing apparatus as claimed in claim 9, further comprising processing means connected to the output side of the detector.

11. (Original) A data processing apparatus as claimed in claim 10, wherein said processing means comprises a plurality of interconnectable processors, each processor being operable to correct the data in accordance with one or more different correction criteria for enhancing the detection capability of the apparatus.

12-18. (Cancelled).

19. (Previously presented) A data processing apparatus as claimed in claim 3, wherein the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.

20. (Previously presented) A data processing apparatus as claimed in claim 3, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

21. (Previously presented) A data processing apparatus as claimed in claim 4, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

22. (Previously presented) A data processing apparatus as claimed in claim 19, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

23. (Previously presented) A data processing apparatus as claimed in claim 3, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

24. (Previously presented) A data processing apparatus as claimed in claim 4, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

25. (Previously presented) A data processing apparatus as claimed in claim 5, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

26. (Cancelled).

27. (Previously presented) A data processing apparatus as claimed in claim 19, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

28. (Previously presented) A data processing apparatus as claimed in claim 20, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

29. (Previously presented) A data processing apparatus as claimed in claim 21, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

30. (Previously presented) A data processing apparatus as claimed in claim 22, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

31. (New) A data processing apparatus as claimed in claim 1, wherein the multiple-bit data are corrected by interchanging and/or shifting the polarities of a number of data-bits at said portion of the multiple-bit data.

32. (New) A data processing apparatus as claimed in claim 1, whercin the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.

33. (New) A data processing apparatus as claimed in claim 1, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

34. (New) A data processing apparatus as claimed in claim 31, wherein the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.

35. (New) A data processing apparatus as claimed in claim 31, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

36. (New) A data processing apparatus as claimed in claim 32, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

37. (New) A data processing apparatus as claimed in claim 34, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.

38. (New) A data processing apparatus as claimed in claim 31, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

39. (New) A data processing apparatus as claimed in claim 32, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.